

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
12 September 2003 (12.09.2003)

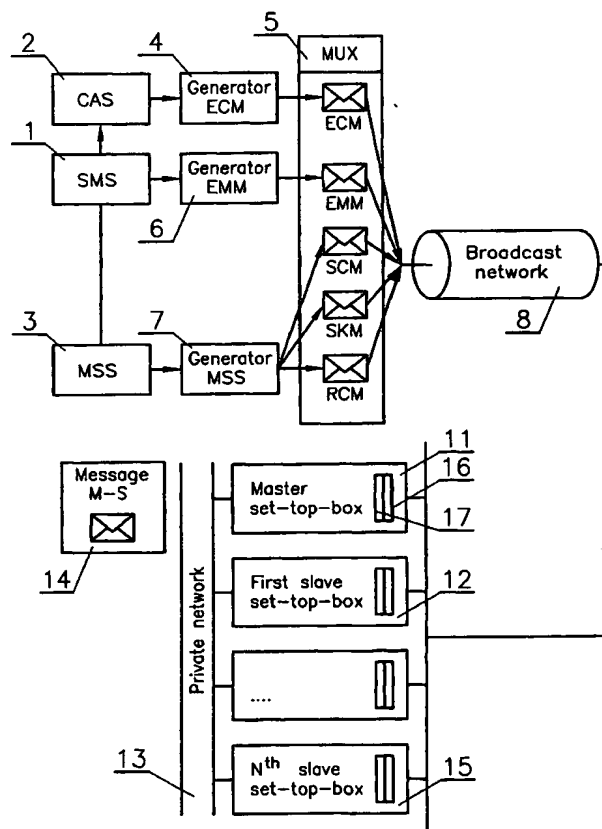
PCT

(10) International Publication Number
WO 2003/075570 A1

- (51) International Patent Classification⁷: **H04N 7/16, 7/167**
- (21) International Application Number:
PCT/PL2003/000013
- (22) International Filing Date: 20 February 2003 (20.02.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
P-352643 6 March 2002 (06.03.2002) PL
P-354371 10 June 2002 (10.06.2002) PL
- (71) Applicants (*for all designated States except US*): **ADVANCED DIGITAL BROADCAST POLSKA SP. Z O.O.** [PL/PL]; ul Trasa Polnocna 16, 65-119 Zielona Gora (PL). **ADVANCED DIGITAL BROADCAST LTD.** [—/—]; 8/F, 145 Chung Shan North Road, Section 2, Taipei 104 (TW).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **DOGANOWSKI, Wojciech** [PL/PL]; ul. Wegierska 3/7, 65-001 Zielona Gora (PL). **CHEN, Sin, Yi** [—/—]; 15 Lane 29, Ta-Shei Street, Hsin Tien, Taipei 111 Taiwan (TW). **HEMPHILL, Earl, Stanley** [US/—]; 32, Lane 16, Section 1, Chung Cheng Road, Taipei 111 Taiwan (TW). **PAWLOWSKI, Adam** [PL/PL]; ul. Rajdowa 14 m.85, 94-003 Lodz (PL).
- (74) Agent: **HUDY, Ludwik**; Czernichów 4, PL-32-070 Czernichów, Kraków (PL).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: BROADCAST NETWORK ACCESS-MANAGEMENT SYSTEM AND METHOD FOR MANAGEMENT OF RECEIVERS OPERATING WITHIN BROADCAST NETWORK



(57) Abstract: In a broadcast network access-management system comprising at least one master decoding device provided with a smart card, and at least one slave decoding device linked to it, and a transmitter device which generates and transmits entitlement management messages intended for the linked master and slave decoding devices and other devices, the master decoding device (11) and at least one slave decoding device (12) linked together are located in a defined distance and operate when a distance between them does not exceed the defined distance dependant upon a cable length, a configuration, a number and quality of splitters and connections.



(84) **Designated States (regional):** ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

- *with international search report*
- *with amended claims and statement*

Date of publication of the amended claims and statement:

29 April 2004

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

AMENDED CLAIMS

[Received by the International Bureau on 22 September 2003 (22.09.03):
original claims 1, 9, 25 and 33 replaced. Claim 43 added [3 pages] ¶

CLAIMS

1. A broadcast network access-management system comprising at least one master decoding device provided with a smart card, and at least one slave decoding device linked to it, and a transmitter device which generates and transmits entitlement management messages intended for the linked master and slave decoding devices and other devices characterised in that the master decoding device (11) and at least one slave decoding device (12) are linked via a connection which is continuously checked and the slave decoding device (12) operates when the connection between the master decoding device (11) and the slave decoding device (12) remains unchanged or changes in allowable limits.

9. The broadcast network access-management system, according to claim 1, in which accuracy of the connection between the master decoding device (11) and the slave decoding device (12) is determined from a level of a signal exchanged between the master decoding device (11) and the slave decoding device (12).

25. A management method of receivers provided with smart cards and linked to a television broadcast network, among which at least one device is the master decoding device with at least one slave decoding device and an interlinked transmitter device which generates and transmits messages that allow to use the master and the slave decoding devices and receivers connected to them, the management method comprising the following steps:
linking the master decoding device (11) and at least one slave decoding device (12) through a connection;
checking continuously the connection between the master decoding device (11) and the slave decoding device (12) for changes occurred;

allowing the slave decoding device (12) to operate only when the connection between the master decoding device (11) and the slave decoding device (12) remains unchanged or changes in allowable limits.

33. The management method, according to claim 25, characterized in that accuracy of the connection between the master decoding device (11) and the slave decoding device (12) is determined from a level of a signal exchanged between the master decoding device (11) and the slave decoding device (12).
Accuracy of connection

43. The broadcast network access-management system, according to claim 1, in which the connection between the master decoding device (11) and the slave decoding device (12) remains unchanged when a cable length, a configuration, a number and a quality of splitters and connections do not change.

Statement under Article 19(1)

The application entitled BROADCAST NETWORK ACCESS-MANAGEMENT SYSTEM AND METHOD FOR MANAGEMENT OF RECEIVERS OPERATING WITHIN BROADCAST NETWORK contained claims 1 to 42. Claims 1, 9, 25, 33 replaced by amended claims bearing the same numbers. Claim 43 added.

Amendment to claims 1, 9, 25 and 33 is based on the language of specification page 8, lines 4 - 29. New claim 43 is based on the language of claim 1 as originally filed.

Amendment is submitting to change the base claims 1 and 25, to add claim 43 and to correct and clarify the language of the claims 1 and 25 of the present invention.

Respectfully submitted,

Advanced Digital Broadcast Polska Sp. z o.o.
ul. Trasa Północna 16, 65-119 Zielona Góra, Poland

Advanced Digital Broadcast Ltd.
8/F, 145 Chung Shan North Road, Section 2
Taipei, 104 Taiwan (ROC)

By: *Ludwik Hudy*
.....
Ludwik Hudy, their agent
Tel. No.: 0048 604 505 980